Guidelines for Writing Dissertation Proposals And Dissertations

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General Instructions and Proposal Timeline

This guide is designed to help the student to develop a dissertation proposal from first draft to the proposal meeting. The student should write papers in classes that expand the knowledge and theory base necessary to developing a dissertation topic. There is no set timeline for a proposal. It can take 3 months or longer, depending on how much time is available for the purpose of writing it. Once the proposal has been developed, and after discussing it with committee members, then a meeting is scheduled 2 or more weeks after the proposal has been completed. Copies of the proposal must be placed in the committee members' boxes at least one week, and preferably two, before the meeting. A PPT or other presentation that highlights the major headings of the proposal must be developed and presented to the committee. Committee meetings vary in length, from 1-2 hours. Committee members provide advice and clarify the study so that it can proceed. The Institutional Review Board must be contacted so that doctoral students can go through the modules to be certified to begin data collection. If this is done before the proposal meeting, then once the committee agrees on the proposal, then data collection can begin. The Institutional Review Board modules http://urco.ksu.edu/IRBOverview.html

Style and Formatting

The following information presents guidelines for preparing and writing research dissertation proposals and dissertations. The dissertation must follow the *Publication Manual of the American Psychological Association*, 5th edition (2001) or *Concise Rules for APA Style* (2005) format. I request that a bound copy and a cd be submitted to me after the final defense. You will need to learn about how to submit an electronic dissertation, as well, since all dissertations are now submitted electronically in pdf format.

The Kansas State University EDTR template is useful, though the headings, tables, and figures do not follow APA 5, so they must be changed.

They are useful for automatically providing table of contents page numbers and general formatting. The KSU Graduate School should be consulted for all questions pertaining to form and style that are not addressed in this guide. Their number is 785-532-6191.

ETDR and Helpful KSU websites for Dissertations

1. Guidelines for Submitting Electronic Dissertations

All dissertations must be submitted using the electronic theses, dissertations, and reports format (ETDR). Guidelines, Word templates, tutorials, prior publication, copyright, and how to include audio or video files within the dissertation are provided. It's generally better to write it in a Word file and save it, using the KSU template. The overview of all necessary steps is provided at:

http://www.k-state.edu/grad/etdr/overview/

Tutorials and workshops are located at:

http://www.k-state.edu/grad/etdr/orient/

Using Microsoft Word to Create Theses or Dissertations

This is a tutorial for using Word to format your proposal. It is available in pdf or html formats:

http://www.k-state.edu/grad/etdr/orient/styles%20and%20theses.pdf http://www.k-state.edu/grad/etdr/orient/wordtutorialsat.htm

3. Writing your EDTR information, including templates, guidelines, prior publication and supplemental files is located at:

http://www.k-state.edu/grad/etdr/create/

4. Dissertation Template

You would go to this site and download the template for dissertations. Some people have had difficulties and chose to just use Word without the help of the template, so it is an individual choice. If you wish to see the advantages of

downloading and using the template, then, you would go to http://www.k-state.edu/grad/etdr/template/index.htm

- "Sequestering" your dissertation is for Engineering and Food Science students. There is no need for Education students to do this.
- 6. A submission checklist provides information on the timeline and other pertinent information, including payment, is located at:

http://www.k-state.edu/grad/etdr/submit/

7. Sample EDTR dissertations is located at:

http://www.k-state.edu/grad/etdr/samples/

8. Personal bound copies (for me, yourself and others) is located at:

http://www.k-state.edu/grad/etdr/samples/

Online Dissertation Proposal Guides

An excellent guide for writing dissertation proposals and dissertations is written by Dr. Mark Barron, University of South Dakota. It can be found at: http://www.usd.edu/edad/dissertation_guide.cfm

On this website are guides for writing the qualitative dissertation, as well as a rubric and evaluation guide.

Basic Formatting and Grammar Rules

Below are some general grammatical rules that can save you time in writing your proposal and dissertation:

- 1. While the majority of the research proposal is written in the present and future tenses, the reporting of research reviewed is the past tense (when the research has already been done).
 - 2. A paragraph must have two sentences. It cannot only have one.
- 3. A situation that continues or is still occurring in the present is written in the present tense.

- 4. Do not use "I" or "you". All writing must be written in the third person. If it is necessary to refer to you, then refer to yourself as "the researcher".
- 5. Direct quotations (more than 40 words or four typed lines) should be enclosed in quotation marks and the specific page number from the source of the quotation included in the citation. See the APA manual (p. 292) or Concise Rules for APA Style (pp. 125-127) for more information regarding long direct quotation format.

To engage students, incorporate active learning techniques such as role-plays, discussions, and case study analyses. Make sure That each of the activities is linked to one of the learning outcomes, and is not included simply because it is a good idea. (Cenammo & Kalk, 2005, p. 101)

- 6. Do not use colloquialisms, such "good to go", "picking up the slack", or other imprecise phrases or wordings. Be as precise as possible with word choices. Imprecision allows multiple choices for interpretation, which is not desirable.
- 7. Use multiple ways to cite someone when not quoting. Words to use include "stated", "posited" (if it is a proposed theory or viewpoint), "said", "found" (if research), suggested (similar to posited), though there are others.
- 8. For the proposal, what will be done should be in the future tense, while past research that has been cited is stated in the past tense.
- 9. A situation that continues is written in the present tense. For example, "Education, today, with the advent of the "No Child Left Behind" Act, relies more on technology through online testing than ever before."
- 10. The methodology and findings in the final dissertation are written in the past tense, since the study has been done, at that point.

General Formatting and Page Numbering Guidelines

Preceding the main body of the report are several pages containing the preliminary material. The following lists the elements (in order) that comprise the preliminary material. While both proposals and final dissertations contain a Title Page, the remainder of the preliminary pages are reserved for the final dissertation. A page number tutorial is located at http://www.k-state.edu/grad/etdr/orient/video_pageno/

Title Page

Copyright Page

Abstract

Committee Signature Page

Acknowledgments

Table of Contents

Figures

Tables

Acknowledgement

Dedication

Please note that page numbers for preliminary material are written in small Roman numerals (e.g., iii, iv, v, etc.) that are centered at the bottom margin of the page. The Title Page is not numbered. An example title page example is on the next page. It should have these elements:

Title

Ву

(name)

degrees

A DISSERTATON PROPOSAL

Submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Curriculum and Instruction

College of Education

Kansas State University

Manhattan, Kansas

year

Doctoral Committee:

Major Professor

Dr. Rosemary Talab

(name)

(name)

(name)

The Copyright Page (if included) is not numbered. The Abstract begins on page i (if there is a Copyright Page, or page ii if there is no Copyright Page).

The Table of Contents is next. At the top of the table of contents should be tables, charts, and figures. The Chapter titles should be in all capital letters. Each section should have major words started using capital letters (Choosing the Best Plan). Headings and subheadings and the remaining preliminary pages are numbered consecutively.

For the main body of the paper, all pages are numbered with Arabic numerals in the middle of the page at the bottom in footer. Use the EDTR Check to assure that the page number font matches that of the narrative. Pages in the main body of the paper (including the Appendixes) run consecutively from page 1 (the first page of Chapter 1) to the end of the content, including appendices. Use all capital letters for chapters (CHAPTER 1) and Level 1 headings for Sections (Section 1) to be centered. Second level subheadings are indented 5 spaces. Third level subheadings are indented another 5 spaces. Please note that your text (and tables or figures) should not extend beyond any of the margins on any page (including appendixes that may be reduced copied if necessary).

Since the first three chapters (Introduction, Review of Related Literature and/or Research, and Methodology) are almost identical for both the proposal and final dissertation (except for verb tense in all three chapters), the following discussion of these chapters pertains to both. Chapter titles and suggested section headings appear as they would in an actual proposal/dissertation (see next page).

Proposal Components

Topic headings within chapters are used to separate important ideas, theories, or approaches that are important to the dissertation proposal. Chapter sub-headings should be provided when a new sub-topic of several paragraphs to several pages is introduced. This is necessary for each topic, since topic headings move the discussion along according to the important elements/theoretical frameworks/research/theories of a proposal. Each topic that is worthy of a heading (level 1) is also worthy of a short review of what you have learned at the end.

Proposal/Dissertation Chapter Format

A dissertation proposal consists of three chapters: the Introduction (Chapter 1), the Review of Related Literature (which includes relevant research and dissertations)(Chapter 2), and the Methodology (Chapter 3). The completed dissertation begins with the same three chapters and concludes with two additional chapters that report research findings (Chapter 4) and conclusions, discussion, and recommendations, or lessons learned, if qualitative (Chapter 5).

CHAPTER 1 INTRODUCTION AND STATEMENT OF THE PROBLEM Introduction

Chapter 1, which introduces the study and states the focus of the study, begins with background information regarding the problem under investigation. The Introduction should provide readers with a brief summary of literature and research related to the problem being investigated, and should lead up to the statement of the problem. In general, the Introduction begins with a broader perspective of the problem and becomes narrower as the Introduction proceeds. *Quantitative/Mixed Methods Studies*

This section may be divided into three separate sections, 1) the Introduction, 2) background of the problem, and 3) conceptual framework. The conceptual framework is either the third section or is introduced in Chapter 2, the Literature Review. The Introduction narrows the focus of the study and provides a brief rationale for why the particular study is worth pursuing. Generally, the introductory section of Chapter 1 consists of about three to six pages, but may vary considerably depending on the nature of the study. The Introduction (and Background of the Problem) section(s) are normally expanded in Chapter 2 (Review of Related Literature). Try to include the most recent studies in this section, as it is an indicator of how recent the literature review has been done.

The conceptual/theoretical framework is the basis for the study. This framework determines how you will choose to study the topic and how you will ask and answer your research questions. For example, if the study asks how class groups develop artifacts through project-based learning, then the framework could be project-based learning and constructivism, social constructivism, self-efficacy, or other theory, which would then be the basis for the questions. A study on direct teaching would not utilize constructivist theory

as its conceptual framework, unless the study compared direct to constructivist models. If the study wishes to examine how students learn in groups, then social constructivism could be one possible theoretical framework. If the study is about college student perceptions of course websites as instructional resources, then the study would choose a theoretical framework that framed the "instructional resources", such as Gagne's Nine Events of Instruction or other framework that applied. Thereby, the research questions would be matched to the theory. Next, define terms, how they will be used, and then explain the relevance of the framework to the problem to be studied.

Case Studies

In a case study, there are three sections: 1) the Problem, 2) Purpose, 3) and Context. The problem to be researched is introduced. Once the problem to be studied has been described, then the purpose of the study is explained so that the reader understands why the research is to be undertaken, as well as the research goal. The context "sets the stage" for the study, and the researcher endeavors to be as descriptive and detailed as possible to provide an understanding for the nature of the study and its participants.

Statement of the Problem

As the heading implies, the purpose of the study is stated in this section. The problem statement is among the most critical parts of the research proposal or dissertation because it provides focus and direction for the remainder of the study. A well-written problem statement defines the problem and helps identify the variables that will be investigated in the study.

Generally, there is no one "correct" or "best way" to write the problem statement. However, the following examples illustrate commonly used formats that are acceptable.

- 1. This study will compare, contrast, investigate, describe, determine, examine, develop, clarify, or evaluate (the issue) being studied.
- This study is designed to investigate the concerns and barriers of Engineering faculty in Regents' Institutions in implementing online learning in the State of Kansas.

Purpose(s) of the Study

This section follows by stating the specific purpose(s) of the study. It is usually one paragraph long. Sometimes it is two paragraphs. It should state what the study is about. For example,

The purpose of the study is to define the role of Louisiana teacher facilitators. Specific objectives are: 1) To define the role of the facilitator, 2) To identify primary responsibilities of the facilitator, 3) To present recommendations for improving facilitator training programs and/or in-services, and 4) To investigate the effects of technology on the role of the facilitator as a change agent and technology leader.

Another qualitative study's purpose was:

The purpose of this study is to increase contextual knowledge of Exemplary integration of technology by examining teacher-identified Classroom change brought about by the integration of the internet And related computer use.

Research Questions or (Null) Hypotheses

The problem statement is further explicated in this section of Chapter 1. Hypotheses and research questions emerge from the problem statement and operationalize it in terms of specific variables and relationships to be examined and reported. Hypotheses and research questions also suggest methodology for the study and serve as the basis for drawing conclusions in Chapter 5. While hypotheses and research questions may be included under their own subheading, they are often added on to the Statement of the Problem.

Hypotheses (either directional, research, or in the null form) are stated when the research design is experimental or quasi-experimental in nature. This would be when a survey studies known variables, such as sex, age, years in service, years in profession, etc. Survey research most often uses null hypotheses.

Hypotheses are tested using one-tailed and two-tailed tests, and for Type II and I errors. Null Hypotheses are always stated as "no difference". The goal of the researcher is to reject them at the .05 level of significance (or lower). There are many examples online, though for an example, see

http://www.hunter.cuny.edu/edu/apiccian/edstat02.html

Two examples of Null Hypotheses would be:

Null Hypothesis(Ho) 1: There is no significant difference in the perceived need for computer training skills between the mean scores of male and female teachers.

Null Hypothesis (Ho) 2a: There is no significant difference between the mean scores on the self-efficacy test between teachers who integrate technology into instruction using ISTE NETS for teachers and students in their lesson plans and those who do not.

Null Hypothesis (Ho) 3b: There is no significant difference between the Number of boys and the number of girls who consistently make the Right choices conforming to principled ethics as defined by stages 5 and 6 Of Kohlberg's Theory of Moral Development.

NOTE: When developing these questions, make sure that they match the survey, case study question grid and protocol, or other study methodology. These questions should carry through on all chapters through to findings, results and recommendations.

Non-experimental research is generally limited to research questions. When possible, avoid the use of "Yes-No" research questions, which tend to limit the scope of your responses. Frequently, "Yes-No" type research questions can be reworded to a more useful form that results in the collection of more useful data. For example:

"Yes-No": Do instructional designers agree on the causes of student

success in distance learning courses?

Reworded: To what extent do instructional designers agree on the

success in distance learning courses?

Significance of the Study (Problem)

This section addresses the "so what" of the study and report. It describes or explains the potential value of the study and findings to the district, state, country, the field of Educational Technology, or the field of Education, in general. This section, therefore, should identify the audience for the study and how the results will be beneficial to them. The reader must understand what previous studies were found and what this study can offer that is unique.

Definition of Terms

This section of Chapter 1 provides definitions for terms used in the proposal that are unusual to committee members or are not widely understood. In addition, common terms that have special meaning in the study should be defined in this section. Acronyms (except those in common usage) frequently require definition at this point. Always spell out the name, first -Association for Educational Communications and Technology (AECT) and have the acronym given after that. Thereafter, use the acronym.

A brief introductory statement usually precedes the actual list of definitions that are underlined, indented, and listed in alphabetical order. The following is an example of the introduction to this section:

The following definitions are provided to ensure uniformity and understanding of these terms throughout the study. The researcher developed all definitions not accompanied by a citation.

When defining terms, it is important to cite appropriate authoritative references. For example, for a definition of "instructional design", a definition from the Association for Educational Communications and Technology (AECT), which developed the term, would be more authoritative, since this is an important part of AECT's work. The following examples illustrate this format. Direct quotations require a page number. Paraphrased definitions do not require a page number. Note that the period goes after the citation.

<u>Distance education:</u> "Teaching and learning in which learning normally occurs in a different time and/or place from teaching" (Moore & Kearsley, 2005).

Educational technology: "...a complex, integrated process involving people, procedures, ideas, devices and organization, for analyzing problems, and devising, implementing, evaluating and managing solutions to those problems, involved in all aspects of human learning (Association for Educational Communications and Technology, 1979).

Limitations (of the Study) (Optional)

Limitations are factors, usually beyond the researcher's control, that may affect the results of the study or how the results are interpreted. Stating limitations of the study may be very useful for readers because they provide a method to acknowledge possible errors or difficulties in interpreting results of the study. Limitations that are not readily apparent at the start of the research project

may develop or become apparent as the study progresses. Limitations are factors or conditions that help the reader get a truer sense of what the study results mean and how widely they can be generalized. While all studies have some inherent limitations, address only those that may have a significant effect on this particular study.

Examples of frequently encountered limitations might include the following:

- Due to the small/unique sample available for the study, results may not be generalizable beyond the specific population from which the sample was drawn.
- 2. Due to the length of the study, a significant number of respondents available in the preliminary testing may be unavailable or unwilling to participate in the final stage of testing.
- 3. This study is limited due to the general categories for identification of topics in analyzing the course syllabi, survey item 39, and written comments established by the researcher.
- 3. The researcher chose to use the *College admissions data handbook* 2007-2008 when discrepancies were noted in tuition and enrollment.
- 4. The researcher elected not to investigate technology experiences in other subject courses outside the pre-service technology course.

Although stating limitations of the study assists the reader in understanding some of the inherent problems encountered by the researcher, it is also important for the researcher to design and conduct the study in a manner that precludes having such numerous or severe limitations. Research designs that control or account for the unwanted influence of extraneous variables help

assure that the study results are both valid and reliable – thus keeping limitations of the study to a reasonable number and scope.

Delimitations (Optional)

Delimitations are factors that affect the study over which the research generally does have some degree of control. Delimitations describe the scope of the study or establish parameters or limits for the study. Frequently, setting limits on the sample size, extent of the geographic region from which data are collected, response formats included in data-collecting instruments, or the time frame for the study makes the study feasible for the researcher, and such delimitations should be noted here.

Examples of delimitations might include the following:

- In order to assure manageability of the collected data, survey instruments used only multiple-choice items and did not include open-ended response items.
- Due to the large number of potential participants in the study population, the current study focused only on faculty members located in the Regents Universities within the state of Kansas.

Assumptions (Optional)

Assumptions stated in this section of Chapter 1 usually address limitations that the researcher is aware of that may affect the study, but which the researcher will not attempt to control. Assumptions may also be used to state whether or not limiting factors are likely or unlikely to affect the outcome of the study. Conditions that have already been stated as limitations or delimitations should not be addressed in this section. (For example, if respondents' honesty has been listed as a possible limitation, there should not also be an assumption that respondents will answer honestly.)

Examples of assumptions might include the following:

1. It is assumed that all respondents will answer all survey questions honestly and to the best of their abilities.

Organization of the Study

The final section in Chapter 1 summarizes the contents of each of the chapters that will comprise the study. This section tells the readers what information will be found in each chapter and facilitates finding specific information without searching through the dissertation page by page to do so. This section also provides a logical transition into the next chapter of the dissertation. The following presents an example of this section:

Chapter 1 has presented the introduction, statement of the problem, research questions, significance of the study, definition of terms, and limitations of the study. Chapter 2 contains the review of related literature and research related to the problem being investigated (be specific – summarize the actual contents of the review). The methodology and procedures used to gather data for the study are presented in Chapter 3. The results of analyses and findings to emerge from the study are (will be) contained in Chapter 4. Chapter 5 contains (will contain) a summary of the study and findings, conclusions drawn from the findings, a discussion, and recommendations for further study.

CHAPTER 2 LITERATURE REVIEW

Review of Selected/Related Literature (and Research)

The purpose of Chapter 2 is to provide the reader with a comprehensive review of the literature related to the problem under investigation. The review of related literature should greatly expand upon the introduction and background information presented in Chapter 1. This chapter should contains the theoretical framework of the study, relevant theories and models to the problem, a historical overview of the problem, current trends related to the problem, and significant research data published about the problem. The first section of Chapter 2 generally indicates how the chapter is organized and explains the subsections that comprise the chapter. As Chapter 2 may be lengthy, it is essential to divide the chapter into as many sections and subsections as needed to logically organize the information presented.

As Chapter 2 presents information and conclusions drawn by other researchers, citations should be used extensively throughout the chapter. Although presenting information from other researchers and writers, avoid overuse of direct quotations. Including many direct quotations produces a literature review that usually lacks transitions and flow, and is difficult to read. Chapter 2 is NOT the place for the researcher to interject any personal ideas or theories. Direct quotations, indirect quotations or paraphrasing, as well as any information attributable to other researchers and individuals require citations. Citations (and subsequent references at the end of the dissertation) should use the format recommended by the *Publication Manual of the American Psychological Association*, 5th edition (2001). Google for APA 5 citation style or else see pp. 207-281 of the APA manual (Concise Rules, pp. 125-187). It is important that each and every study that is cited be described according to its

relationship to the theory and research base of the study and how its findings add to this study and the literature. Do not cite studies that have no bearing on this study. When making a statement that is beyond your knowledge and authority, cite appropriate authorities and experts For example:

Few studies have been done on technology in pre-service teacher education programs at historically and predominantly black colleges and universities (Anderson, 1989; Hendrix, Bracy, Davis & Heron, 1984; Swain, 1988).

Note: Multiple citations are cited alphabetically by the first author, not by year (*APA 5*, p. 212).

It is difficult to estimate how long Chapter 2 should be. In some studies that rely on historical and extensively descriptive information, Chapter 2 may be the main focus of the whole dissertation and quite long. In general, however, Chapter 2 contains between 15 and 30 pages, although it may be as short as 10 pages or as long as 50 pages or more. Generally, Chapter 2 ends with a short summary of the information presented in the chapter. Several paragraphs that highlight the most pertinent information from the review of literature are usually sufficient.

The proposal must address all previous relevant research and dissertations on this topic in a coherent manner. It shouldn't just be a list of everything that has been written. Results from each study that are relevant to this one should be stated and evaluated within the context of usefulness to this proposal. The purpose of the review of all relevant dissertations and research is to learn how to study the topic at hand, building upon previous studies, within a theoretical framework.

Each dissertation or study must be examined and evaluated, in turn, for what its findings can add to this proposal. If there is nothing that is relevant in a study, then it should not be a part of the review.

CHAPTER 3 RESEARCH DESIGN AND METHDOLOGY

Methodology and Statistical Consulting

Chapter 3 presents a discussion of the specific steps used in the literature review and collection of data for the study. This chapter generally begins with a restatement of the research problem (and usually includes accompanying hypotheses or research questions) and indicates the major sections to be included in Chapter 3. The information regarding methodology should be comprehensive and detailed enough to permit replication of the study by other researchers.

The KSU Department of Statistics provides both faculty and Statistical Laboratory "walk-in" service to help doctoral students with their methodology. See http://www.k-state.edu/stats/statistical.lab/consulting.html for further information. Also, Getting started in educational Technology research, available free through subscription to the Association for Educational Communications and Technology (http://www.aect.org) or in book format, provides a chart on selecting the appropriate methodology, as well. Whether qualitative or quantitative, a resource that should be cited is:

Cresswell, J. W. (1998). Qualitative inquiry & research design; choosing among five traditions. London, Sage.

Review of Selected Research Literature

This section describes the process used in the review of the literature related to the problem under study. Information in this section should include specific references used in the literature search – such as Educational Resources Information Center (ERIC), Resources in education (RIE), Current index to journals in education (CIJE), Dissertation abstracts international (DAI), Psychological abstracts, Handbook of the association of educational

communications and technology, Proquest research library, KRex (Kansas State University dissertations) etc. – as well as the specific facilities in which these resources were found (e.g., Hale Library, Kansas State University). Italicize all references that represent proper titles of publications, but do not italicize organization names or references that are not titles of publications.

(Note: It is acceptable to include this information in the introduction to Chapter 3 without using a specific section heading. This information, then, becomes part of the introduction to Chapter 3.)

Quantitative Methodology (Surveys)

The following information is presented for Survey research. Other sections follow for qualitative research and case studies (qualitative), which can be paired with survey research (quantitative) for "Mixed Methods" research. If this is done, then the methodology will need to include sections for both types of research. These authorities should be consulted when developing surveys:

Dillman, D. (2007). *Mail and internet surveys*, 2nd ed. Hoboken, New Jersey: Wiley.

Fowler, F. (2002). *Survey research methods*, 3rd ed. Thousand Oaks, CA: Sage Publications.

Population (and Sample)

This section describes the population used in the study and the process utilized in selecting a sample. Unless the population is extremely small, a sample usually will be drawn from the population. The sample should be small enough to provide a manageable volume of data, but the sample must accurately represent the population if any valid inferences are to be drawn from the sample results.

Dillman's "Total Design Method" is very good to insure higher response rates in surveys (http://www.sesrc.wsu.edu/sesrcsite/methodologies/tdm.html
In general, the sample will accurately represent the population from which it is drawn if (a) sample selection carefully follows an appropriate sampling design, (b) the sample is randomly selected from the population, (c) a large enough sample is selected in relation to the total population, and (d) the sample size is adequate for the data-collecting instrument being used.

In order to provide human subjects protection, specific names and organizational identifiers should be avoided except in broad terms. Such statements as "several small private Midwest colleges" or "teachers from selected elementary schools within a large urban district" are preferable. Specific identifiers may be used when there is little or no chance of specific identification of individuals or groups (e.g., "teachers from selected elementary schools in Wichita, Kansas"). The description of the population and sample should be thorough enough, however, to permit another person replicating the study to define a similar sample from a similar population.

Note: It is also acceptable to separate this section into two distinct sections – one for population and the other for sample. If the study is of an entire population then it is unnecessary to use the term sample at all.

Instrumentation

This section describes the procedures used for developing an instrument to gather data from your selected population/sample. This generally includes sources of items for the instrument as well as a description of the instrument itself (e.g., number of items on the instrument, response format of the items, etc.). Sources of items for an instrument might include information gleaned from the literature review or may be an adaptation of a previous study or commercially

available instrument. Instrument reliability and validity data should be described in this section whenever possible.

Pilot Test - Instruments developed by the researcher should always be pilot tested. This means that the survey would be offered to a similar group outside the area of the group to be surveyed or studied. By doing this, ambiguous, duplicate, or unclear questions are determined and eliminated before the final survey is administered. In general, subjects similar to those who will be in the study sample (but not included in the actual sample) may serve as subjects for pilot testing. Results of pilot testing and accompanying comments should be used, if necessary, to revise the instrument before distributing it to the actual sample. Pilot tests are very helpful in determining the clarity, utility, and validity of questions.

While critiquing involves only several experts examining the instrument and making recommendations, pilot testing implies actually following all of the steps of data collection with a smaller pilot sample and analyzing the results from the collected pilot data. While somewhat more time consuming, pilot testing obviously affords the researcher much greater information that leads to a more reliable and valid instrument. The decision regarding pilot testing versus critiquing the instrument should be made following discussion with the researcher's advisor. In some cases, it is best to do both. While critiquing involves only several experts examining the instrument and making recommendations, pilot testing implies actually following all of the steps of data collection with a smaller pilot sample and analyzing the results from the collected pilot data.

Expert Panel - The instrument may also be juried or critiqued by having several "experts" examine it and make recommendations prior to, or in lieu of

pilot testing. However, an "expert panel" is very useful throughout the study, since the panel can further focus the study, help with survey question development, provide ideas about how to interpret findings, and provide guidance and recommendations for further study. Expert panels should be 3 and no more than 5 people who are considered to have expertise at the state, regional, or national level in the area of interest. These people can come from any state, regional, national or international association or institution. Each of them would be contacted via e-mail and then a follow-up phone call and forma letter of request. The expert would then be asked to provide a vita and a short biography that demonstrates the expert's qualifications. Experts can be consulted on the study, itself, the research questions, literature review, and methodology, depending upon the expert's time, expertise, and willingness. The vitas would then be placed into an appendix.

Data Collection

This section describes in detail how the data will be/were (proposal/final dissertation) obtained and the timelines involved in collecting the data. Information commonly provided in this section includes what materials will be/were distributed ---- the survey instrument, cover letter, instruction sheets, self-addressed stamped envelope, number and method/type of follow-ups. It should also include how they will be/were distributed --- mailed or e-mailed to each participant, mailed to someone who distributed them to each participant, etc. It should include how the address information for the survey participants will be obtained. It should include when the instruments will be/were distributed (e.g. all surveys will be mailed on July 12, 2009, with 3 follow-up surveys sent to all non-respondents at one week intervals for two weeks, followed by an e-mail follow-up one week after that. No more than 4 follow-ups should be done.

Beginning and ending dates for data collection are included in this section. See Dillman for data collection protocols.

Data Analysis

This section of Chapter 3 describes in detail treatment and analysis of the collected data. Methods of data analysis are primarily determined by the hypotheses to be tested or research questions to be answered (which also determine the format of the instrument and how the data are gathered) and the level of data being gathered (nominal, ordinal, and/or interval). When several hypotheses/research questions are being addressed, it is helpful to describe the data analysis that will be used for each hypothesis/research question. For example:

- 1. A response to research question one, regarding teachers' perceptions of instructional materials, will be generated by computing means and standard deviations for each survey item.
- 2. A one-way analysis of variance will be used to determine if significant differences in perceptions exist between elementary and secondary technology lead teachers comprising the study sample (research question two).
- 3. Ho 1-a. There are no statistically significant differences in the respondents' perceived training needs on computer skills as a function of their educational attainment. (A MANOVA was used for this question.)

When inferential statistics are employed, the independent and dependent variables for each analysis must be determined and identified. In addition, any complex statistical procedures being used should be briefly described and its source referenced. Tests of significance should be accompanied by a statement of the level of significance that will be used (e.g. all statistical analyses will use the .05 level of significance). The statistical software package being used, as well

as reference to any individuals assisting the researcher with data analysis, should also be stated at the end of Chapter 3. Generally, this package is SPSS, with a version and machine type (Mac or PC), such as SPPSS Graduate Pack 13.0 for Mac OS X.

The most commonly used descriptive statistics include means, standard deviations, frequency counts, and percentages. Among the most commonly used inferential statistics are chi-square, *t* test, analysis of variance (ANOVA), and various correlation coefficients. More complex statistical procedures include analysis of covariance (ANCOVA), multivariate analysis of variance (MANOVA), factor analysis, canonical correlation, multiple regression analysis, and discriminant analysis.

Summary (Optional)

This final section contains a brief summary of the methodology described in Chapter 3. In general, summary sections for Chapter 3 are included only when the methodology section is very long or complex. The summary section should provide a smooth transition to Chapter 4.

Qualitative Research Methodology (Case Studies)

The general structure for Chapter 3 previously described should suffice regardless of the specific research methodology employed for the study, with some exceptions.

Introduction

Qualitative studies ask "how?" and "why?". This section is a restatement of what the researcher wants to learn and why. Since this has been done in Chapter Two, a few paragraphs are all that are needed. The introduction should state why this study is suited to a qualitative design. See Dr. Mark Barron's

guide to a qualitative dissertation proposal for an excellent guide at http://www.usd.edu/ahed/chap3.cfm

Structure of the Study

CHAPTER 3 Research Design and Methodology

Chapter 3 in a case study should have the following components:

Introduction

Restating the research purpose,

Research Questions

 Restatement of the research questions, and propositions, if any (Yin, p. 22)

Research Design

- The specific methodology employed (explanatory, exploratory, or descriptive)
- Modifications to the design (if any),
- Sources of the methodology (authorities in the field)
- Role of the researcher,
- Research design specifics (unit of analysis, linking data to propositions, population or population sample)

Context of the Study

This should describe in a few to several pages the specific description of the population to be studied, the participants, and pertinent facts about the setting

Data Sources

Documentation - archival records (e-mail, print, phone tapes, etc.),
 projects, objects, or other projects or artifacts, and other materials (Yin, p. 86)

Data Collection Methods

- Protocol (Yin, p. 65, p. 68)
- Field procedures (Yin, pp. 72-73)

Data analysis

- Analytic strategies (Yin):
 - o Case description
 - Theoretical propositions and then analyze them based on the propositions
- Pattern matching (Yin)
- Categorical aggregation (Stake)
- Data coding (Stake)
- Content analysis (Mayring)

Trustworthiness

 The criteria for interpreting the findings and specific analytic techniques (Yin, p. 111, pp. 116-132)

When developing this chapter, the following sources, as well as others, can be cited. Since there are different approaches to data analysis, Yin, Mayring, and Merriam have different approaches that apply to different studies, though Mayring's is most straightforward.

Mayring, P. (2000). Qualitative content analysis. *Forum: Qualitative social research* [Online]. 1(2). http://www.qualitative-research.net/fqs-texte-/2-00/2-00mayring-e.htm

Merriam, S. B. (1988). *Case study research in education: A qualitative approach*. San Francisco, CA: Jossey-Bass Publishers.

Merriam, S. B. (1998). Qualitative research and case study applications in education. San Francisco, CA: Jossey-Bass Publishers.

Miles, M. & Huberman, A. (1994). *Qualitative data analysis*. 2nd edition. Thousand Oaks, CA: Sage Publications.

Patton, M. Qualitative research & evaluation methods. (2002). Thousand Oaks, CA: Sage Publications.

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage. Yin, R. (2003). *Case study research: Design and methods*. 3rd ed. Thousand Oaks, CA: Sage Publications.

Case Study Tactics

Unlike quantitative research, in which the researcher collects data as an objective and generally passive observer, many forms of qualitative research case studies and grounded theory testing and development depend directly on the researcher as an active participant in gathering data for the study.

Additionally, in many forms of qualitative research design, the method(s) by which data are collected and used to draw conclusions is/are as important as the conclusions themselves. Yin's chart (2003, p. 34) shows the tests that are used in case studies to determine construct validity, internal validity, external validity, and reliability.

The qualitative researcher must carefully describe the context in such a way that the reader can replicated the study. This usually requires several pages, including descriptions of courses, sections, participants, setting, etc.

The research must also carefully state the methodology employed in the data collection phase of the study. A comprehensive description of the development of the research instrument used to gather data must be given, as well as any changes made in the instrument as the data collection process proceeds. In addition, the researcher's role in the actual collection of data must be clearly articulated to provide a clear framework within which the reader can better understand why certain data are considered relevant to the study and other data are considered extraneous. Finally, the researcher must carefully describe verification steps or processes (such as triangulation or data saturation)

used to substantiate that the data selected for inclusion in the study are valid and reliable. In general, the extra flexibility allowed in qualitative research design requires the researcher to carefully describe how data are collected and utilized within the study.

Protocol

Case study protocol should have four sections to the project: an overview of the project, field procedures (sites, sources of information, procedural reminders), case study questions, which can be in the form of "table shells" for specific arrays of data, and the potential sources of information for answering these questions), and a guide for the case study report (format for the data, use of documentation, etc.). A good guide for interviewing is:

Wengraf, T. (2001) *Qualitative research* interviewing; biographic, narrative, and

semi-structured methods. Thousand Oaks, CA: Sage Publications.

CHAPTER 4 DATA ANALYSIS AND FINDINGS

Findings

Chapter 4 provides results of data analyses and findings of the study. (Please note that Chapter 4 is limited to reporting findings and results, and is not the proper place for conclusions or discussion of the findings.) This chapter begins with an introduction (as do all chapters), which delineates the major sections to be included in the chapter, and may include a restatement of the research problem (and may include accompanying hypotheses or research questions). While there is no one "correct" format for dividing Chapter 4, information regarding response rate and respondent demographics (when relevant) is usually reported first, followed by reporting of results of data analysis for each hypothesis/research question.

Response Rate

Before reporting findings from data analyses – especially when dealing with survey research – the response rate is often described. This allows readers to gauge how many instruments were distributed, how many were not responded to (and reasons, if possible), how many were returned, and what the overall rate of response to the survey was after al follow-ups. This section may be included as part of the introduction without a specific section heading.

Demographic Data

Following the introduction (and response rate data), the next section frequently provides demographic information regarding the study population and sample. As most surveys include at least several demographic items, this section provides readers with a picture of the demographic composition of the respondents/participants. Information such as gender, age, position, years of

experience, etc. is usually reported in this section. This section may also be included without a specific section heading, although a heading is helpful to the readers.

Findings

The remainder of Chapter 4 reports finding related to the hypotheses being tested or research questions being answered. A specific section heading should be used for each section in Chapter 4 that reports findings resulting from data analysis.

General Formatting Information

In general, data are reported in tabular (tables) or graphic (figures) form accompanied by text describing the salient information contained in each table or figure. See the *Publication Manual of the American Psychological Association*, 5th edition (2001), pp. 147-201 or *Concise Rules for APA Style* (2005), pp. 77-118, for specific information regarding the proper format for tables or figures and the relationship of the tables/figures to the accompanying text. A sample table and figure with possible accompanying narrative for each are included on the following page.

Note that a table is generally limited to columns of numbers with appropriate column headings. Figures usually contain graphics such as graphs, diagrams, or photographs.

It is recommended that extremely long tables/figures or very detailed information not be included within Chapter 4. Due to space requirements (and questionable interest to most readers), it is better to place this information in an

Appendix and note in Chapter 4 where the detailed information is located in the Appendix. (E.g., A four-page list containing each respondent's answers to every survey item would be more appropriately placed in an Appendix, while a summary table showing the item means should be included in Chapter 4. A note such as, "Individual responses to each survey item can be found in Appendix E" would alert interested readers where this detailed information can be found.)

Table 1. A Comparison of Female and Male Perceptions Regarding the Difficulty of EDSE 885

	Mean responses			
Course elements	Female	Male	t value	Prob.
Statistical analyses	4.25	4.50	1.50	.450
Research concepts	4.50	4.00	2.75	.005*
Research terminology	3.25	3.50	1.25	.250
Class activities	3.00	3.75	2.50	.025*

^{*} denotes significant difference at .05.

Data regarding female and male perceptions of the difficulty of course elements for ESE 885 are summarized in Table 1. In general, both respondent groups considered statistical analyses and research concepts to be the most difficult course elements. When comparing group responses, female students (M = 4.50) considered research concepts significantly more difficult than males (M = 4.50)

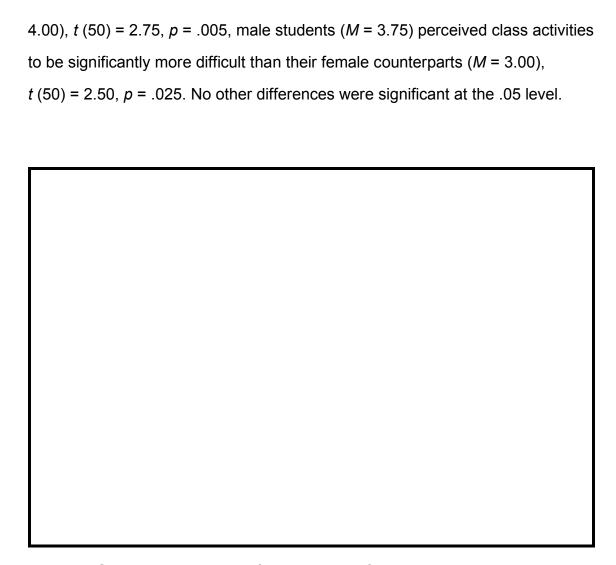


Figure 1. Growth in enrollment of ethnic groups from 1987 to 1997.

Data regarding the growth of ethnic minority groups enrolled in the university during the past decade are presented graphically in Figure 1. Of all ethnic minorities, Asians have shown the greatest enrollment growth (48%) during the past 10 years. During the same period, growth in enrollment for white students (8%) has been slower than for any of the minority groups reported.

(Note: Tables and figures are separated from text by two double spaces – above and below the table/figure, and table/figures usually follow the accompanying narrative..)

Statistical Symbols

When reporting statistical results of data analyses (particularly inferential statistics) it is appropriate to include sufficient information in the table and accompanying text to permit the reader to corroborate the results of the analyses. Therefore, appropriate statistical symbols should be utilized to report these results. (For a complete treatment of this topic see the APA publication manual, 5th edition, pp. 139-147; or pages 69-75 in the Concise Rules).

Within dissertations (and other manuscripts) statistical symbols are italicized. Words, rather than symbols, should be used in the narrative, while symbols may be used in tables and inside of parentheses within the narrative. For example, "The mean of 3.25 for boys was higher than the mean of 3.00 for girls in the sample." But, "The boys in the sample scored higher overall (M = 3.25) than the girls (M = 3.00)." Among the more commonly used statistical symbols are the following:

M = mean df = degrees of freedom

SD = standard deviation t = t statistic (t tests)

f = frequency F = Fisher's statistic (ANOVA)

p = probability r = correlation coefficient (Pearson)

N, n = number $X^2 = \text{Chi-square statistic}$

It is also helpful for the reader if some basic information accompanies the statistical results presented in the text. Information usually includes such data as degrees of freedom or sample size. The following examples demonstrate how commonly used statistics would be reported in the narrative.

- 1. Results of the t test for independent samples indicated a significant difference in mean scores for the boys (M = 3.75) and girls (M = 3.00), t(50) = 2.54, p = .024.
- 2. Results of the chi-square test indicated a significant association between gender and mathematics achievement, $X^2(3, N = 48) = 12.54, p < .05$.
- 3. Results of the one-way analysis of variance indicated a significant difference in test scores based upon students' grade levels, F(2, 124) = 4.24, p = .036.

Summary (Optional)

This final section provides a summary of the highlights of the findings from Chapter 4 and provides a transition to Chapter 5.

CHAPTER 5

Summary, Conclusions, Discussion, and Recommendations (or Lessons Learned, if Qualitative)

Summary

The Summary section of Chapter 5 provides a brief recap of the entire study. Generally, this section summarizes the introduction, problem statement and hypotheses/research questions, literature review, methodology, and findings. Someone reading this section would have a good overview of why the study was done, the specific purpose of the study and hypotheses/research questions, what the literature relates about the problem under investigation (very briefly), the methods used to gather data for the study, and findings emerging from analysis of the data. Note that the findings are part of the Summary and are not included in a separate section. (When considering submitting research findings for publication, the Summary section of Chapter 5 should serve as an abbreviated format for the manuscript to be submitted.)

While not mandatory, this section is generally subdivided into subsections (with corresponding subheads) related to purpose, literature review, methodology (procedures), and findings. Although there is no "best" length for this section, usually three to six pages provides an adequate overview of the study. If the section gets much longer than this, it fails to remain a "summary." Be aware that too long a summary of the literature review is the most frequent contributor to the summary running longer than needed.

Conclusions

This section presents conclusions drawn from the findings and results of the data analysis. Findings from the present study should provide the primary information for drawing conclusions. Frequently, conclusions provide answers to hypotheses or research questions posed in Chapter 1. While conclusions may be written in narrative form or listed one at a time, listing them one at a time is generally easier for readers to follow and helps maintain clarity of focus for each conclusion. An important observation regarding conclusions is in order:

Conclusions are not the same as findings and should not simply be restatements of findings from Chapter 4. A conclusion should be broader and more encompassing than a specific finding, and several findings may be incorporated into one conclusion. While several findings may be used to support one conclusion, it is also possible that one finding might give rise to several conclusions (although this is somewhat less common). Generally, while specific findings are stated in the past tense (e.g., students expressed greatest satisfaction with university instructors), conclusions are stated in the present tense (e.g., students are most satisfied with university instructors). The following illustrates the relationship between findings and conclusions.

A study of public school technology directors across the United States in 1991 yielded the following findings:

- 1. Only 5% were non-White
- 2. Only 8% were female

From these findings the following conclusion was drawn: *Women and minorities continue to remain underrepresented in the ranks of public school technology directors.* (Note: This conclusion combined both findings into a single broad statement that appears well supported by the study findings.)

Discussion

The discussion section provides a forum within which the researcher explores and attempts to explain findings and conclusions that emerged from the

study. Within this section, the researcher attempts to interpret findings and conclusions, and relate these to both the purpose of the study and to published results from other studies examined in the literature review. This section may be used to forward theories and/or models, or raise questions regarding previously developed theories.

It is important to note that the discussion section in Chapter 5 provides the researcher with one of the very few opportunities throughout the dissertation to explore ideas and possibilities. Unlike most other sections of the dissertation whose content and form are dictated by fairly rigid standards, the discussion section may be open-ended and take the form that researcher desires. Some researchers choose to discuss each conclusion or finding separately, while others prefer to address several or all of them at once in a general discussion.

Recommendations

The final section of Chapter 5 contains recommendations that emerge from the study. Generally, recommendations are of two distinct types; recommendations for action or practice (based on the study's findings and conclusions, and sometimes headed *Recommendations from the Study* or *Recommendations for Practice*), and *Recommendations for Further Study*. Frequently a separate section is included for each set of recommendations – each with an appropriate section heading.

Recommendations for practice are generally prescriptive in nature and address what could or should be done by practitioners or members of the intended audience in terms of professional practice and policy. These recommendations are based upon results of the study. For example,

1. Since male and female teachers rated elements of the educational technology professional development program much differently, the

administration should provide gender-appropriate training to the teachers that highlight gender differences.

Recommendations for further study contain suggestions regarding followup studies or replication studies. These recommendations usually acknowledge limitations or delimitations that the study included and which further studies could help explain or clarify. These might include different methodologies, expanded populations or samples, or changes in the instrument itself. For example,

1. Since the current study was completed using a cross-sectional survey design, a similar study should be planned within the same school that uses a longitudinal design to determine if changes over time become perceptible.

ATTACHMENTS TO THE PROPOSAL/DISSERTATION References

The list of references following Chapter 5 should include all references that were cited throughout the body of the proposal or dissertation. Conversely, there should be no references listed that did not appear as citations within the paper. For the completed dissertation, the reference list commonly contains between 60 and 100 entries (although more or less are frequently found). (Bibliographies, on the other hand, may include works consulted from which no specific citations were used and should be subdivided into sections distinguishing works actually cited in the text from works consulted but not cited. Please note, however, the APA style dictates a reference list rather than a bibliography.)

The format for listing references is described in detail in the *Publication Manual of the American Psychological Association*, 5th edition (2001), pp. 207-281 (Concise Rules, pp. 125-187), and the same style should be used for references as has been used throughout the dissertation for citations. Careful attention should be paid to the reference section in terms of omissions, extra inclusions, or differences in dates or the spelling of authors' names between the citation and the reference listing. The following examples illustrate the basic reference formats for a periodical and a book.

Cassidy, H. (2005). How to survive dissertation research at Kansas State University. *KSU Journal of Education*, *16*(4), 24-36.

Ranger, L. (2006). How to survive dissertation research at Kansas State University: A guidebook. Manhattan, KS: KSU Press.

Appendixes

The final attachments to the proposal or dissertation are the Appendixes (not Appendices). The Appendixes contain pertinent (and often supplementary) materials that are not important enough, do not fit appropriately in any specific section of the body, or are too long to include in the body of the paper, but which may be of interest to some readers. Common elements found in the Appendixes include a copy of the data-gathering instrument, a copy of the cover letter, copies of any letters of permission required for the study, and tables that are very long or of only minor importance to the study. A copy of the Institutional Review Board approval may also be included in an appendix.

A FINAL NOTE

The ultimate form and content of the proposal and dissertation will be determined by the doctoral advisor, committee members, and the researcher. Each student, therefore, should work closely with their advisor and committee members and clarify any questions or problems as soon as they arise.

Appendix A
Sample Proposal Title Page

(2" from top to title)

Teacher change processes and student products of exemplary technology integration sites in Kansas

by

Marilyn K. May

B.S., Kansas State University, 1974

M.S., Kansas State University, 1998

A Proposal/Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

Department of Curriculum & Instruction
College of Education
Kansas State University
Manhattan, Kansas
May 2008
(1" bottom margin)

Approved by: Major Professor Dr. Rosemary Talab Appendix B

Sample Copyright Page

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Marilyn May ALL RIGHTS RESERVED Appendix C

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Appendix E
Sample Dissertation Abstract

ABSTRACT

The purpose of this study was to learn the perceived training needs of the support staff in the six Kansas Board of Regents' (KBOR) university libraries. Based on data from field and pilot studies and advice from an expert panel, a survey instrument was designed to assess library support staff's perceptions of their train needs on computer skills, interpersonal skills, supervision/management skills, important library/organizational support, helpful training delivery methods, and training sources. The survey instrument was administered to the entire 167 support staff in the six KBOR university libraries, with a return rate of 83 percent achieved through two mailings and two postcard reminders. Quantitative data from the responses to closed–ended questions were analyzed through descriptive measures and one–way multivariate analysis of variance (MANOVA). Qualitative approaches to code answers from open–ended questions were utilized in order to allow stakeholder themes to emerge.

Quantitative analyses indicated that the respondents viewed the most important training topics for each area of the study to be: database searching and MS Office suites for computer skills; working with difficult people and managing priorities for interpersonal skills; training new employees and supervising student employees for supervision/management skills; being supplied with appropriate software, release time, and technical support were viewed as the most important library support that would help their training. The respondents perceived classroom instruction with a teacher and interactive classroom discussions as being the most helpful delivery methods. The respondents considered in-house trainers, supervisors, and co-workers as being the most helpful training sources. A series of MANOVA tests were conducted on the six areas of the study. At the alpha = .05 level, statistically

significant differences were found in the respondents' perceptions of training needs on computer skills measured by their work units, supervision/management skills measured by their work units and level of job responsibilities, the respondents' perceptions of important library/organizational support measured by their total years in the library filed and age range, and the respondents' perceptions of helpful training sources measured by their total years at current positions.

Qualitative analyses provided 314 units of information on 32 themes on additional training topics, library/organizational support, delivery methods, and training sources. The top 10 themes were related to "Software programs," "Windows operating systems," "Release time," "Supervisor/management support," "Relevance/applicable training," "Promotion/opportunities," "Training for motivation," "Classroom with feedback," "Training materials," and "Ono-on-one and in-house training." Based on the findings, summaries, and conclusions of this study, the researcher made recommendations for further study that focuses on job training needs of support staff at university libraries, including a broader scope of training topics, motivating factors, the perceptions of library administrators on the support staff s training needs, training needs on supervision/management for non-supervision support staff, differing views on library/organizational support, different training delivery methods, etc.

Appendix F
Human Subjects Approval

The KSU University Research Compliance Office administers the Institutional Review Board (IRB), which is responsible for examining and approving all research proposals for studies being conducted by KSU faculty and students to ensure that study participants are not inadvertently put at risk by participating in your study. All doctoral students must complete the training modules before securing permission to collect data for their dissertations.

Securing approval from the IRB (785-532-3224) prior to conducting your study is essential (and failure to do so could result in the nullification of any data collected during your study). More information regarding the process and forms is available online at http://urco.ksu.edu/

It is generally advisable to secure Human Subjects approval prior to conducting pilot studies or preliminary studies that require administering them using an instrument of any type. In general, IRB approval is sought immediately following approval of the proposal by the dissertation committee.

Each student is required to complete a request form for IRB approval by going to the website, and clicking on IRB (Human Subjects), then on the "Training Modules" site and going through all of them. To access the IRB application, click on "Files & Content" and then click on Application. For sample applications, click on "Sample informed consent forms". The major professor signs the application for the study. The major professor is the "principal investigator" and must be on graduate faculty. The student must get the major professor's signature on the form and return it to the Research Compliance Office. These forms can be downloaded and signed, then returned via mail or campus mail to 302 Fairchild (8-12 and 1-5 M-F).

Appendix G

Dissertation Credit Guidelines

After completing 1/3-1/2 of your coursework, you will begin to enroll for dissertation credits, though it varies with each person. Thirty hours must be taken to graduate. Two options are possible for dissertation credit: "Incomplete" and "No Credit". Incomplete means that the work was done. No Credit means that the work was not done. Students do not receive "Credit" for dissertation hours until the final Dissertation Defense has been completed. Following are some suggested dissertation credit guidelines to assist you in knowing the appropriate credit hours to enroll in depending on what stage you are in the dissertation process. Enrollment in dissertation credit is by permission of the major advisor, so you will need to consult with Dr. Talab before enrolling in dissertation hours. The following chart summarizes the suggested guidelines for aligning dissertation credits with progress on completing the dissertation research and paper.

Credits Taken	Tasks Accomplished
1-3	Identified topic and drafted problem/purpose statement
4-16	Research and draft literature review
7-9	Completed proposal (Chapters 1 – 3)
	Students should not be allowed to register for more than 9 credits if they have not successfully completed their proposal
10-20	Data analysis and drafting Chapter 4
21-30	Completion of Chapter 5 and final revision of dissertation